Homogeneous DNA Analysis

UNIVERSITY OF UTAH

CENTER

This new center was formed to commercialize a novel suite of fast, user-friendly and inexpensive DNA sequence analysis tools that could be fielded in a doctor's office rather than requiring the services of an expensive reference laboratory, and which will reach markets including cancer testing, the diagnosis of inherited diseases, and rapid bioterrorism detection.

TECHNOLOGY

The central innovation involves a new, high-resolution twist on a very old technique for DNA sequence analysis: thermal denaturation profiles. A fluorescent dye, added before amplification via polymerase chain reaction (PCR),



allows the melting transition of the PCR product to be continuously monitored without ever moving it from the same tube. Data processing allows even minute sequence changes to be readily identified through their effect on the melting profile.

ACCOMPLISHMENTS

The Center's first product has already been licensed to a Utah firm, Idaho Technologies, Inc., which has commenced commercial sales. Additional applications, instruments and software are currently in development, and collaboration with another Center of Excellence in the College of Engineering has begun.

THINK TANK

What if there was a way to...



Perform DNAbased diagnostic tests right in your doctor's office, instead of waiting weeks for your results?

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